

In the Claims:

Please amend Claims 1-15, 17-20, 59-63, 72-74 and 76; cancel Claims 16, 21-58, 75, and 80; and add new Claims 81-84, all as shown below. Applicant respectfully reserves the right to prosecute any originally presented or canceled claims in a continuing or future application.

1. (Currently Amended) A method for rendering a portal graphical user interface (GUI) for a portal, comprising:

~~providing for the representation of a GUI desktop, a GUI look and feel, and a GUI book as a set of controls, wherein the set of controls can be organized in a logical hierarchy, wherein each said control represents a corresponding graphical element in the portal GUI, wherein each said control has properties that can be read and set, wherein each said control is implemented as one or more classes in an object-oriented programming paradigm, wherein each said control has one or more methods which can be overridden to provide specialization of each said control;~~

~~traversing, using at least one processor, the logical hierarchy representation, wherein the traversing comprises:~~

~~associating a first theme with a first control in the set of controls;~~

~~rendering the first control according to the first theme;~~

~~rendering any descendents of the first control according to the first theme unless the theme is overridden;~~

~~wherein overriding a second control, which is a descendent of the first control, can override the theme with a second theme such that the descendent of the first second control uses the second theme and any descendent of the descendent of the first second control uses the second theme unless the second theme is overridden at the descendent of the descendent of the first control; and~~

~~rendering the first control according to the first theme in parallel with rendering of the second control according to the second theme.~~

~~wherein one of the set of controls can communicate with another of the set of controls;~~

~~wherein controls represent corresponding graphical and functional elements in web applications; the controls have properties that can be read and set, and the controls can interact with each other through an event notification mechanism, the controls also have methods which provide services and which may be overridden to provide specialization of the control; controls~~

~~are implemented as one or more classes in an object-oriented programming paradigm to allow for new properties, events and/or specialized control methods to be provided by extending base control classes related to these features, at least some controls can serve as containers for other controls;~~

~~wherein at least two controls that are graphical elements in a web application that intercommunicate using the event notification mechanism; and~~

~~wherein the traversing step is done using at least one processor.~~

2. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
representing a desktop in the GUI by a desktop control, wherein the desktop is a view of a portal.

~~the desktop is a view of a portal;~~

~~wherein the desktop can be represented by a desktop control; and wherein the desktop control is hierarchically superior to a [[the]] shell control in the GUI and to a [[the]] book control in the GUI.~~

3. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
using a [[the]] look and feel control to determines determine an [[the]] appearance of the portal; wherein the look and feel can be represented by a look and feel control; and wherein the theme is a variation of the look and feel.

4. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
using a [[the]] book can be used to navigate to at least one portal page in the portal[[.]],
and wherein the book is represented by a book control.

5. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
using one control of the set of controls [[can]] to respond to an event raised by another control of the set of controls.

6. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
a control can have associating an interchangeable persistence mechanism with a control of the set of controls.

7. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
~~a control can have~~ associating an interchangeable rendering mechanism with a control
of the set of controls.
8. (Currently Amended) The method of claim 1, further comprising:
accepting a request to access the portal.
9. (Currently Amended) The method of claim 8 ~~wherein further comprising:~~
allowing the request to be ~~[[in]]~~ a hypertext transfer protocol (HTTP) request.
10. (Currently Amended) The method of claim 8 ~~wherein further comprising:~~
originating the request ~~originates~~ from a Web browser.
11. (Currently Amended) The method of claim 1, further comprising:
generating a response from the portal.
12. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
using a control of the set of controls ~~[[can]]~~ to represent one of: button, text field, menu,
table, window, window control, title bar, pop-up window, check-box button, radio button, window
frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and
toggle button.
13. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
associating the first theme with the first control can occur when the first control is
rendered.
14. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
allowing the first control to inherit ~~inherits~~ the first theme from a parent control.
15. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
using the first theme specifies to specify at least one of the appearance and~~[[/or]]~~
functioning of ~~[[an]]~~ a control in the GUI.

16. (Canceled).

17. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
specifying the first theme can be specified in whole or in part by a properties file.

18. (Currently Amended) The method of claim 17 ~~wherein further comprising:~~
including in the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

19. (Currently Amended) The method of claim 17 ~~wherein further comprising:~~
using the properties file [[can]] to specify at least one image.

20. (Currently Amended) The method of claim 1 ~~wherein further comprising:~~
using the GUI [[is]] as a part of a portal on the World Wide Web.

21-58. (Canceled).

59. (Currently Amended) A machine readable storage medium having instructions stored thereon that when executed by a processor cause a system to:

~~provide for the representation of GUI desktop, a GUI look and feel, and a GUI book as a set of controls,~~ wherein the set of controls are organized in a logical hierarchy, wherein each said control represents a corresponding graphical element in a portal graphical user interface (GUI) for a portal, wherein each said control has properties that can be read and set, wherein each said control is implemented as one or more classes in an object-oriented programming paradigm, wherein each said control has one or more methods which can be overridden to provide specialization of each said control;

traverse the logical hierarchy representation, wherein the traversing comprises instructions to cause the system to:

associate a first theme with a first control in the set of controls;

render the first control according to the first theme;

render any descendents of the first control according to the first theme unless the theme is overridden;

~~wherein override a second control, which is a descendent of the first control, can override the theme with a second theme such that the descendent of the first second control uses the second theme and any descendent of the descendent of the first second control uses the second theme unless the second theme is overridden at the descendent of the descendent of the first control; and~~

~~render the first control according to the first theme in parallel with rendering of the second control according to the second theme.~~

~~wherein one of the set of controls can communicate with another of the set of controls;~~

~~wherein controls represent corresponding graphical and functional elements in web applications; the controls have properties that can be read and set, and the controls can interact with each other through an event notification mechanism, the controls also have methods which provide services and which may be overridden to provide specialization of the control, controls are implemented as one or more classes in an object-oriented programming paradigm to allow for new properties, events and/or specialized control methods to be provided by extending base control classes related to these features, at least some controls can serve as containers for other controls.~~

60. (Currently Amended) The machine readable storage medium of claim 59, further comprising instructions stored thereon that when executed by a processor cause a system to perform the step of:

accepting a request to access the portal.

61. (Currently Amended) The machine readable storage medium of claim 59 wherein:

[[the]] a desktop in the GUI is a view of [[a]] the portal[[:]], wherein the desktop can be represented by a desktop control[[:]], and wherein the desktop control is hierarchically superior to [[the]] a shell control in the GUI and to [[the]] a book control in the GUI.

62. (Currently Amended) The machine readable storage medium of claim 59 wherein:

a [[the]] look and feel control in the GUI determines the appearance of the portal; wherein the look and feel can be represented by a look and feel control; and wherein the theme is a variation of the look and feel.

63. (Currently Amended) The machine readable storage medium of claim 59 wherein:

[[the]] a book in the GUI can be used to navigate to at least one portal page in the portal; and wherein the book is represented by a book control.

64. (Previously Presented) The machine readable storage medium of claim 59 wherein:
one of the set of controls can respond to an event raised by another of the set of controls.

65. (Previously Presented) The machine readable storage medium of claim 59 wherein:
a control can have an interchangeable persistence mechanism.

66. (Previously Presented) The machine readable storage medium of claim 59 wherein:
a control can have an interchangeable rendering mechanism.

67. (Previously Presented) The machine readable storage medium of claim 59, further comprising instructions that when executed cause the system to:
accept a request.

68. (Previously Presented) The machine readable storage medium of claim 67 wherein:
the request in a hypertext transfer protocol (HTTP) request.

69. (Previously Presented) The machine readable storage medium of claim 67 wherein:
the request originates from a Web browser.

70. (Previously Presented) The machine readable storage medium of claim 59, further comprising instructions that when executed cause the system to:
generate a response.

71. (Previously Presented) The machine readable storage medium of claim 59 wherein:
a control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

72. (Currently Amended) The machine readable storage medium of claim 59 [[wherein]] further comprising instructions stored thereon that when executed by a processor cause a system to perform the step of:

associating the first theme with the first control can occur when the first control is rendered.

73. (Currently Amended) The machine readable storage medium of claim 59 wherein: the first control inherits the first theme from a parent control.

74. (Currently Amended) The machine readable storage medium of claim 59 wherein: the first theme specifies the appearance and/or functioning of [[an]] a control in the GUI.

75. (Canceled).

76. (Currently Amended) The machine readable storage medium of claim 59 wherein: the first theme can be specified in whole or in part by a properties file.

77. (Previously Presented) The machine readable storage medium of claim 76 wherein: the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

78. (Previously Presented) The machine readable storage medium of claim 76 wherein: the properties file can specify at least one image.

79. (Previously Presented) The machine readable storage medium of claim 59 wherein: the GUI is part of a portal on the World Wide Web.

80. (Canceled).

81. (New) The method of claim 1, further comprising:
using a first thread to render the first control, and a different thread to render another control in the set of controls.

82. (New) The method of claim 1, further comprising:

using a mainline render to obtain a render result for a control in the set of controls, if said control has been previously rendered by a separate render process.

83. (New) The method of claim 1, further comprising:

including content from an external site in each threads that is used to render one or more controls of the set of controls.

84. (New) The method of claim 1, further comprising:

allowing at least one said control to interact with another said control through an event notification mechanism.